



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/048,119

06/10/2002

Reiner Gieck

1999P02445

1678

24131 7590 06/09/2009  
LERNER GREENBERG STEMER LLP  
P O BOX 2480  
HOLLYWOOD, FL 33022-2480

EXAMINER

AGHDAM, FRESHTEH N

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/048,119	<b>Applicant(s)</b> GIECK, REINER	
	<b>Examiner</b> FRESHTEH N. AGHDAM	<b>Art Unit</b> 2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10 is/are rejected.
- 7) ☒ Claim(s) 4-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-10 have been considered but are moot -in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGhee (US 6,389,065) , and further in view of Chen (US 6,246,694)..

As to claim 1, McGhee teaches a method of data transmission, comprising:  
determining and storing at least one transmission method, with at least one  
transmission speed to achieve desired performance for different line parameters of a  
line (abstract, fig. 2, means 20); with at least one transmission unit, measuring and  
analyzing signal-to-noise ratio of a line (fig. 4, step 46); with at least one transmission  
unit, selecting at least one transmission method based on the analysis (steps 48, 50,  
and 54); with at least one transmission unit, measuring line parameters of a line using  
the at least one transmission method (steps 56, 42, and 46); with at least one  
transmission unit, comparing the measured line parameters with the line parameters  
stored in the table (steps 48 and 50); with at least one transmission unit, determining

Art Unit: 2611

and selecting the transmission method having a transmission speed as a function of the comparison (steps 52, 54, 58, 60, and 62). One of ordinary skill in the art would recognize that it is well known in the art that the baud rate and associated constellation size in the system of McGhee corresponds to the maximum transmission throughput in order to enhance data transmission/communications as it is evidenced by Chen (col. Lines 40-45). One of ordinary skill in the art would recognize that it is a design choice and/or well known in the art to define noise for a signal-to-noise ratio as noise plus interference, white noise, interference, and so forth in order to improve accuracy or reduce hardware complexity of the communication system. Therefore, it would have been obvious to one of ordinary skill in the art to measure and analyze interference for the reason stated above.

As to claim 2, McGhee further teaches the line parameters are represented by the attenuation of the line (receiver gain, step 46). McGhee does not expressly teach that the line parameter is represented by the running time of the line. However, one of ordinary skill in the art would recognize that the more line parameters (such as running time, SNR, carrier frequency offset, envelope delay distortion, and so forth) measured the higher the accuracy of the selected transmission method and transmission speed in view of the maximum allowable data throughput. Therefore, it would have been obvious to one of ordinary skill in the art to measure the running time of the line in addition to the attenuation and interference for the reason stated above.

As to claim 4, Chen further teaches that the maximum data throughput rate for different line parameters is determined with different transmission methods and

Art Unit: 2611

transmission speeds, by selecting the transmission methods in the frequency range of which the line parameters demonstrate the least variations (col. 4, table 3, col. 5, lines 24-31). McGhee and Chen do not expressly teach that the line parameters are represented by the running time of the line. However, one of ordinary skill in the art would recognize that the more line parameters (such as running time, envelope delay distortion, and so forth) measured the higher the accuracy of the selected transmission method and transmission speed in view of the maximum allowable data throughput. Therefore, it would have been obvious to one of ordinary skill in the art to measure the running time in addition to the attenuation and interference for the reason stated above.

As to claim 10, McGhee further teaches determining in a test set up and storing in the table, a wide variety of transmission procedures and line properties line properties at different frequencies and frequency ranges (fig. 2, means 18, col. 2, lines 58-66, Chen, col. 4, lines 9-65, col. 5, lines 24-31, col. 7, lines 11-28).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGhee and Chen, further in view of Goodson et al (US 5,715,277).

As to claim 3, Goodson further teaches that the running time is determined by a measurement of the phase difference between two signals with different frequencies, one of the two signals formed according to the transmission method (col. 4, lines 56-63; col. 5, lines 20-33; col. 10, lines 21-30). Therefore, it would have been obvious to one of ordinary skill in the art to measure the running time of the line as taught by Goodson in order to obtain the line parameter.

***Allowable Subject Matter***

Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. N. A./

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611